
****THIS IS A NEW I.M. – PLEASE READ CAREFULLY.****

**SUGGESTED GUIDELINES
MINIMUM REQUIREMENTS FOR PLANT APPROVAL
CONCRETE PIPE AND RELATED PRECAST UNITS**

AGGREGATES

- Source Approval
- Gradation
- Quality Requirements

MIX DESIGN

- Batch Weights
- Minimum Cement Content
- Strength
- Slump

QUALITY CONTROL PLAN

- QC Duties and Responsibilities
- Frequency of Measurements
- Frequency of Testing
- Calculation
- Rebar and Wire Placement
- Welding and/or Tying
- Reports and Reporting

PLANT CALIBRATION

- Frequency (Minimum once per year)
- Accuracy of Scale
- Calibration by an approved agency and witnessed by Iowa DOT staff

TESTING

- Frequency - Strength in accordance with the requirements of [I.M. 445](#)
- Frequency – Pipe Testing in accordance with the requirements of [I.M. 445](#)
- Frequency – Absorption Testing
- Frequency – Gradation Testing

MARKING AND IDENTIFICATION

- Markings/Stamping – Class, design, plant ID, date of manufacture, and trademark should be plainly marked or stenciled on the inside of the pipe near the tongues not later than 24 hours after the pipe or the precast unit is made.

PRODUCTION PROCESS

- Welding
- Mixing
- Curing
- Handling
- Storage

CERTIFICATION REQUIREMENTS

- Certified Aggregate Technician
- A certified aggregate technician must perform the aggregate gradation. Certified gradation from the aggregate source is acceptable.

DOCUMENTATION

- Certification statement
- Documentation of measurements, mixes, etc.
- Reports and reporting

OTHER MATERIALS

- Cement - Approved Sources – Mill Test Reports
- Reinforcing Steel - Approved Sources – Mill Test Reports
- Wire - Approved Sources – Mill Test Reports
- Admixtures - Approved Sources – Certifications